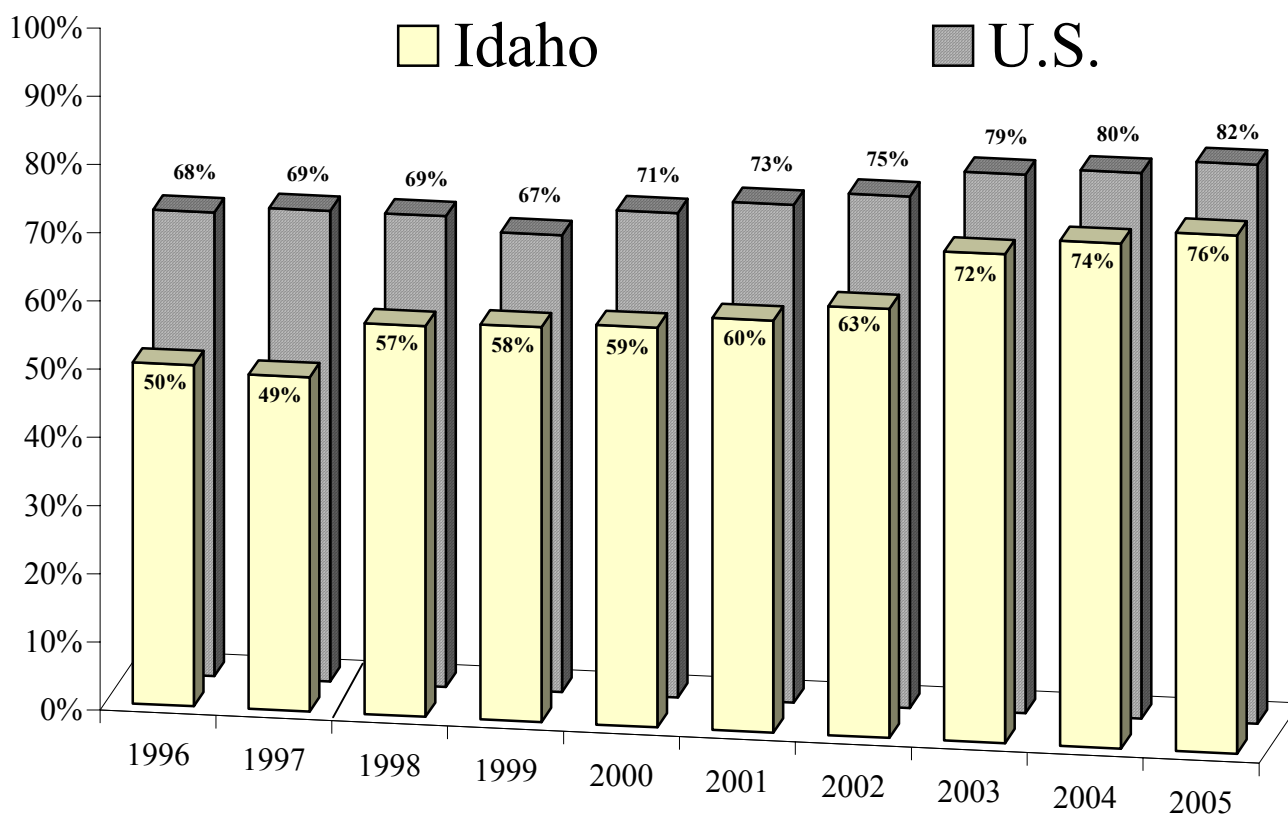


Safety Restraint Usage

Idaho's seat belt use law, effective July 1, 1986, requires seat belt use for front seat passengers and drivers, regardless of residency, in vehicles with a gross vehicle weight of 8,000 pounds or less that were manufactured with safety belts. The law is a "secondary" law and can only be enforced when someone is stopped for another traffic violation. The law was updated July 1, 2003. It now covers all seating positions and has enhanced penalties for drivers less than 18 years of age. Drivers and occupants, 18 years of age and older, receive separate tickets.

Figure 13 depicts observed seat belt use by year for both Idaho and the U.S. The figures are the observed rates for persons in passenger cars, pickups, sport utility vehicles, and vans, which make up 94% of the vehicles involved in motor vehicle crashes. The U.S. usage rate comes from the National Occupant Protection Use Survey (NOPUS) and the mini NOPUS, which are done alternately every year.

Figure 13
Observed Seat Belt Usage – Idaho vs. U.S.: 1996 - 2005



The methodology for the observational seat belt survey was changed in 1998 in accordance with the National Highway Traffic Safety Administration (NHTSA) guidelines. Comparisons of 1998 and future surveys to historical data (1986 – 1997 surveys) should be made with caution as the new methodology differs greatly from the previous methodology. Likewise, the methodology for the national survey differs from that of Idaho and does not include any observation sites in Idaho.

Observational Seat Belt Survey Results

Table 26 shows the observed shoulder harness seat belt use by county.

Table 26 Observed Seat Belt Use by County: 2001-2005							
	2001	2002	2003	2004	2005	Change 2004-2005	Avg. Change 2001-2004
Ada	66.8%	64.3%	81.0%	85.3%	89.9%	5.4%	9.2%
Bannock	56.0%	58.5%	55.7%	61.2%	58.7%	-4.0%	3.2%
Bingham	51.8%	45.2%	47.4%	45.2%	48.7%	7.8%	-4.2%
Blaine	52.3%	60.0%	68.7%	68.6%	66.9%	-2.5%	9.7%
Bonner	54.4%	70.9%	74.4%	75.3%	73.0%	-3.1%	12.2%
Bonneville	63.4%	62.5%	59.4%	72.4%	70.7%	-2.4%	5.2%
Canyon	58.3%	63.2%	75.1%	77.9%	79.2%	1.7%	10.3%
Cassia	49.1%	49.6%	53.9%	41.8%	66.9%	59.9%	-4.3%
Elmore	57.7%	52.9%	67.9%	70.2%	68.3%	-2.7%	7.8%
Kootenai	59.5%	70.2%	78.6%	76.8%	78.5%	2.2%	9.2%
Latah	57.6%	74.0%	74.2%	71.9%	78.6%	9.3%	8.5%
Madison	49.7%	52.4%	58.8%	58.0%	62.2%	7.3%	5.4%
Minidoka	48.1%	48.5%	55.6%	54.2%	75.3%	39.0%	4.3%
Nez Perce	56.2%	65.4%	74.4%	77.6%	82.5%	6.3%	11.5%
Payette	63.3%	61.2%	71.9%	76.1%	75.4%	-0.9%	6.7%
Twin Falls	54.4%	58.9%	63.0%	73.2%	74.5%	1.8%	10.4%
Statewide	60.4%	62.9%	71.7%	74.0%	76.0%	2.7%	7.1%

The Office of Traffic & Highway Safety evaluates compliance rates through analysis of collision data and statewide observational surveys of seat belt use. Observational surveys are conducted by observing shoulder harness use or non-use. The observational survey is a representative sample of the state and does not include all counties.

Table 27 shows the observed seat belt use for the Idaho Transportation Department (ITD) districts⁴ by vehicle type. District 3 (south-western Idaho) had the highest overall usage at 85.4%, while district 5 (south-eastern Idaho) had the overall lowest usage at 55.4%.

Table 27 Idaho Safety Belt Observation Survey: 2005 – Usage by Vehicle Type				
ITD District	Passenger Cars	Vans and Sport Utility Vehicles	Pickup Trucks	All Vehicles
1	76.1%	84.6%	63.6%	75.7%
2	84.6%	84.7%	71.3%	81.1%
3	89.3%	90.0%	73.2%	85.4%
4	77.8%	74.3%	59.3%	71.5%
5	59.4%	64.5%	40.3%	55.4%
6	74.6%	72.1%	53.3%	68.0%
Statewide	79.9%	82.4%	62.9%	76.0%

Usage rates for the occupants of pickup trucks continue to be significantly lower than usage rates for other types of passenger vehicles. The usage rate for pickup truck occupants in 2005 ranged from a high of 73.2% in District 3 (south-western Idaho) to a low of 40.3% in District 5 (south-eastern Idaho).

Seat belt usage varied by the type of roadway the vehicles were traveling on. It ranged from a high of 96.6% on urban interstates to a low of 61.2% on rural minor collectors.

There was no statistically significant difference between urban and rural sites. Usage on urban roadways was 77.1%, while usage on rural roadways was 73.5%. There was also no statistically significant difference between major and minor roadways. Usage on major roadways was 79.8% while usage on minor roadways was 73.5%. Major roads were defined as interstates and principal arterials. Minor roads were comprised of the rest of the roadway functional classifications.

Self-Reported Seat Belt Usage Results

Table 28 shows the self-reported seat belt use for people, ages 7 and older (ages 4 and older prior to 2005), in passenger cars, pickups, sport utility vehicles, and vans that were killed or seriously injured. The child passenger safety seat law was upgraded in 2005 to include children age 6 and younger. Research has indicated there is a tendency for persons involved in collisions to falsely report compliance with the seat belt law and thus, self-reported use tends to overstate actual use⁵. Seat belt use by severely or fatally injured occupants can be more directly assessed by law enforcement officers or emergency medical personnel, and is therefore, more reliable.

Table 28 Self-Reported Seat Belt Use : 2001-2005 Age 7 and older in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans							
Injury Type	2001	2002	2003	2004	2005	Change 2004-2005	Avg. Change 2001-2004
Fatalities -Restraints Used	29.7%	37.5%	37.2%	42.4%	40.0%	-5.5%	13.1%
Serious Injuries -Restraint Used	51.0%	57.6%	58.4%	64.7%	64.7%	0.0%	8.4%

Of the 220 passenger motor vehicle occupants killed in 2005, only 88 were using seat belts. The National Highway Traffic Safety Administration estimates seat belts are 50% effective in preventing fatalities and serious injuries. By this estimate, we can deduce that 88 lives were saved in 2005 by seat belt usage. An additional 63 lives could have been saved if everyone had buckled up.

Costs of Injuries by Safety Restraint Use

Table 29 2005 Costs of Injuries Persons Using Safety Restraints versus Persons Not Using Safety Restraints (Age 7 & Older)						
Injury Type	Safety Restraints			Costs of Injuries		
	Used	Not Used	Unknown	Used	Not Used	Unknown
Fatality	88	126	6	\$292,277,064	\$418,487,615	\$19,927,982
Serious Injury	913	452	46	\$209,933,622	\$103,932,089	\$10,577,159
Visible Injury	2,831	728	78	\$130,191,037	\$33,479,009	\$3,587,037
Possible Injury	6,566	773	225	\$159,365,091	\$18,761,684	\$5,461,033
Total				\$791,766,814	\$574,660,396	\$39,553,211

Self-reported seat belt use is biased because of the penalties involved for not wearing a seat belt (meaning people misrepresent their belt use to avoid a ticket). While 88% of the motor vehicle occupants in crashes said they were wearing seat belts, the observational surveys show only 76% wearing seat belts. The numbers of people using seat belts are higher for the less severe injury categories because of this bias, but also because seat belts lessen the severity of injuries sustained in crashes. Had the occupants that were seriously injured and belted not been wearing a seat belt, they may have been killed.

Local Safety Restraint Usage

Table 30 presents self-reported restraint use rates for all motor vehicle occupants, 7 years old and older, involved in fatal and serious injury collisions for each county, comparing 2001 through 2005. Collision data provides an analysis of the restraint use at the local level. This information is self-reported to the investigating officer after a collision. The self-reported use is for all occupants, regardless of injury type, involved in fatal and serious injury crashes.

Table 30 Self-Reported Restraint Use in Fatal and Serious Injury Crashes by County: 2001-2005 in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans							
County by Population	2001	2002	2003	2004	2005	Change 2004-2005	Avg. Change 2001-2004
50,000 and over							
Ada	70.3%	77.0%	75.5%	83.2%	85.0%	2.2%	5.9%
Bannock	62.3%	55.6%	72.1%	66.7%	73.5%	10.3%	3.8%
Bonneville	59.2%	63.8%	68.5%	73.9%	63.2%	-14.6%	7.7%
Canyon	69.4%	62.2%	69.5%	73.5%	79.1%	7.7%	2.4%
Kootenai	73.9%	77.9%	82.8%	80.4%	79.4%	-1.3%	2.9%
Twin Falls	56.9%	81.0%	61.6%	73.1%	82.6%	13.0%	12.4%
20,000 - 49,999							
Bingham	52.2%	55.1%	61.0%	61.2%	58.0%	-5.1%	5.5%
Blaine	83.3%	48.7%	60.5%	60.7%	55.3%	-9.0%	-5.6%
Bonner	45.1%	62.6%	80.7%	64.8%	73.0%	12.6%	16.1%
Cassia	53.3%	51.0%	37.7%	71.1%	65.6%	-7.7%	19.4%
Elmore	64.4%	66.7%	57.4%	65.4%	69.8%	6.7%	1.2%
Latah	54.6%	65.2%	69.8%	59.2%	84.1%	42.1%	3.8%
Madison	33.3%	65.6%	62.5%	44.0%	48.0%	9.1%	20.8%
Nez Perce	57.4%	80.7%	68.0%	83.1%	73.8%	-11.1%	15.7%
Payette	52.9%	58.2%	67.4%	74.5%	79.0%	6.1%	12.1%
10,000 - 19,999							
Boundary	55.2%	73.9%	50.0%	85.7%	58.3%	-31.9%	24.3%
Franklin	50.0%	23.3%	56.3%	47.8%	31.8%	-33.5%	24.3%
Fremont	40.6%	57.6%	55.9%	73.0%	43.8%	-40.1%	23.2%
Gem	43.5%	58.3%	71.4%	72.7%	60.0%	-17.5%	19.5%
Gooding	38.8%	55.8%	51.0%	55.9%	52.5%	-6.0%	14.9%
Idaho	52.4%	63.4%	43.8%	53.2%	75.0%	40.9%	3.9%
Jefferson	44.4%	57.1%	59.1%	56.8%	72.0%	26.8%	9.3%
Jerome	48.8%	55.5%	66.7%	73.6%	63.1%	-14.2%	14.7%
Minidoka	34.9%	48.3%	62.5%	66.2%	67.5%	1.9%	24.6%
Owyhee	26.7%	46.3%	23.5%	53.1%	32.6%	-38.6%	50.1%
Shoshone	50.0%	59.1%	47.4%	76.5%	14.8%	-80.6%	19.9%

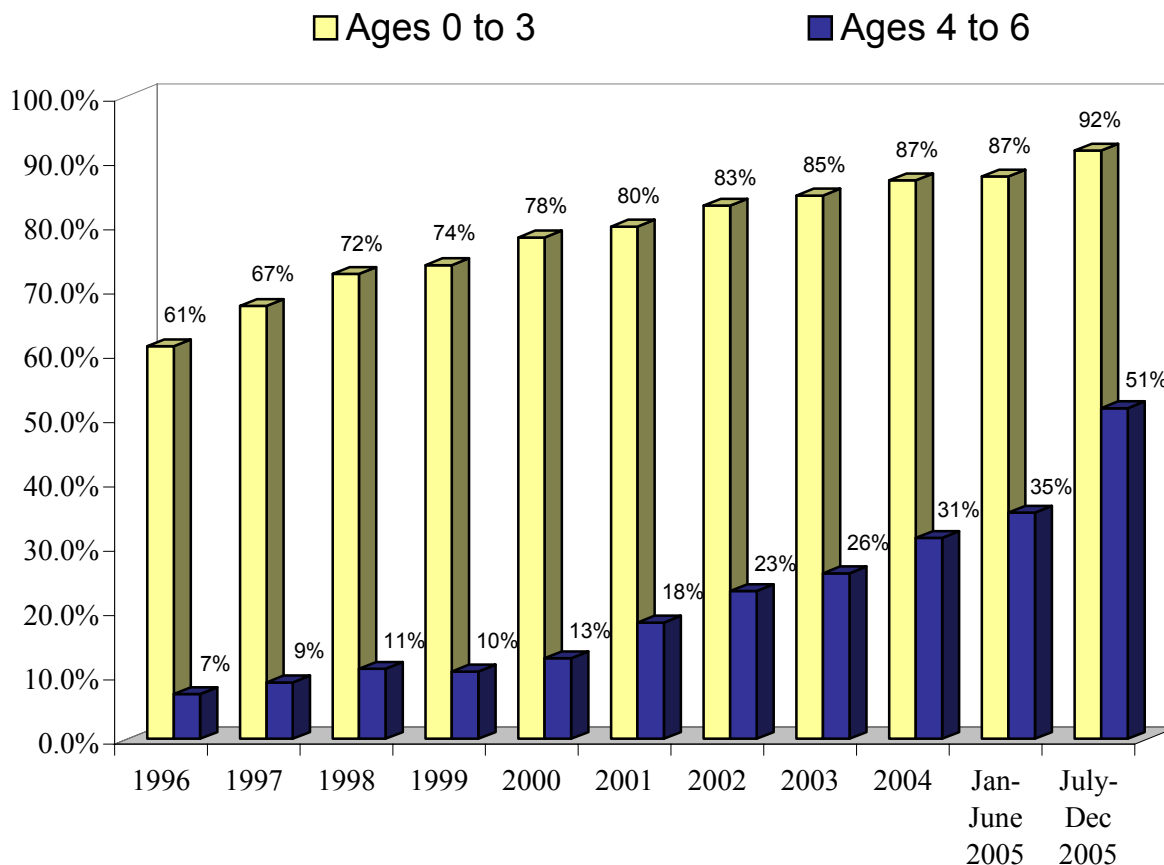
Table 30 (Continued)
Self-Reported Restraint Use in Fatal and Serious Injury Crashes by County: 2001-2005
in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans

County by Population	2001	2002	2003	2004	2005	Change 2004-2005	Avg. Change 2001-2004
5,000 - 9,999							
Bear Lake	57.1%	66.7%	29.4%	72.7%	75.0%	3.1%	36.0%
Benewah	40.0%	43.2%	60.0%	63.2%	63.6%	0.8%	17.4%
Boise	72.7%	64.0%	64.1%	61.4%	59.1%	-3.7%	-5.4%
Caribou	52.2%	47.5%	21.4%	50.0%	46.7%	-6.7%	23.2%
Clearwater	37.5%	81.8%	44.4%	78.6%	66.7%	-15.1%	49.8%
Lemhi	46.7%	60.5%	53.3%	83.3%	50.0%	-40.0%	24.7%
Power	42.3%	48.0%	65.0%	56.3%	52.6%	-6.4%	11.8%
Teton	35.7%	45.5%	81.8%	0.0%	28.6%	100.0%	2.4%
Valley	51.9%	71.4%	62.9%	60.0%	45.8%	-23.6%	7.1%
Washington	54.6%	71.4%	96.2%	33.3%	73.3%	120.0%	0.1%
0 - 4,999							
Adams	33.3%	92.3%	58.3%	40.0%	31.3%	-21.9%	36.2%
Butte	33.3%	88.9%	71.4%	50.0%	44.4%	-11.1%	39.0%
Camas	81.8%	100.0%	50.0%	20.0%	50.0%	150.0%	-29.3%
Clark	75.0%	36.4%	60.0%	100.0%	61.5%	-38.5%	26.7%
Custer	55.0%	45.0%	37.5%	52.6%	76.5%	45.3%	1.8%
Lewis	80.8%	90.0%	57.1%	62.5%	76.2%	21.9%	-5.2%
Lincoln	18.2%	42.1%	36.4%	90.9%	54.6%	-40.0%	89.3%
Oneida	64.3%	45.5%	64.0%	55.2%	40.0%	-27.5%	-0.8%
Statewide Average	60.7%	65.7%	67.6%	72.1%	72.2%	0.1%	5.9%

Child Safety Seat Usage by Age Groups

The child safety seat law was upgraded in 2005 to include all children under the age of 7 years old. The law took effect July 1, 2005. Prior to that, Idaho Code required every child, under the age of four, and weighing less than 40 pounds be restrained in a car safety seat that meets the federal standards when traveling in a non-commercial motor vehicle manufactured with seat belts after January 1, 1966.

Figure 14
Child Safety Seat Usage by Age Group: 1996 - 2005



The change in the child safety seat law increased usage among the 4 to 6 year old age group by 16 percentage points in the last half of 2005. Increased publicity of the law change also seemed to have an effect on the 0 to 3 year old age group, increasing child safety seat usage by 5 percentage points.

Child Safety Seat – Self-Reported Usage

Table 31 shows self-reported child safety seat use for children in passenger cars, pickups, sport utility vehicles, and vans from 2001 to 2005. The higher numbers of children and lower percentage usage in 2005 is due to changing the criteria for examining child safety seat use to include children ages 4 through 6 years old.

Table 31 Self-Reported Child Safety Seat Use by Injury Type: 2001-2005 Under Age 4 (through 2004) and Under Age 7 (2005 and after) in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans							
Injury Type	2001	2002	2003	2004	2005	Change 2004-2005	Avg. Change 2001-2004
Fatalities							
Restrained	1	1	3	6	5	-16.7%	100.0%
Unrestrained	3	3	2	1	0	-100.0%	-27.8%
Serious Injuries							
Restrained	5	9	13	3	17	466.7%	15.8%
Unrestrained	5	7	3	5	19	280.0%	16.5%
Visible Injuries							
Restrained	39	37	30	39	51	30.8%	2.0%
Unrestrained	29	22	19	12	39	225.0%	-24.9%
Possible Injuries							
Restrained	113	139	162	182	204	12.1%	17.3%
Unrestrained	39	36	49	30	122	306.7%	-3.5%
No Injuries							
Restrained	1,486	1,620	1,777	1,889	2,449	29.6%	8.3%
Unrestrained	338	301	283	259	932	259.8%	-8.5%
Total Restrained	1,525	1,654	1,843	2,119	2,727	28.7%	11.6%
Total Unrestrained	318	280	296	319	1,119	250.8%	0.5%
% of Children Restrained	82.7%	85.5%	86.2%	86.9%	70.9%	-18.4%	1.7%

The National Highway Traffic Safety Administration estimates child safety seats are 69% effective in preventing fatalities and serious injuries. By this estimate we can deduce that a child safety seats saved 7 lives in 2005. Additionally, 25 serious injuries were prevented and 13 of the 19 unrestrained serious injuries may have been prevented if they had all been properly restrained.